

- Marshall, S. A. and S. B. Peck. 1985. Distribution of cave dwelling Sphaeroceridae of eastern North America. Proc. Entomol. Soc. Ont. (in press).
- Richards, O. W. 1930. The British species of Sphaeroceridae (Borboridae, Diptera). Proc. Zool. Soc. Lond. 18: 261-345.
- Roháček, J. 1982-3. A monograph and reclassification of the previous genus *Limosina* Macquart (Diptera, Sphaeroceridae) of Europe. Part 1, Beitr. Entomol. 32: 195-282 and Part 2, Beitr. Entomol. 33: 3-195.

PROC. ENTOMOL. SOC. WASH.
87(4), 1985, p. 769

NOTE

Further Evidence of Nuptial Feeding in *Sepedon* (Diptera: Sciomyzidae)

We had already submitted our manuscript on nuptial feeding in *Sepedon* (Berg and Valley, 1985, Proc. Entomol. Soc. Wash. 87, pp. 622-633) when R. E. Orth alerted us to a relevant paper that we had overlooked. It is: Barraclough, D. A., 1983. The biology and immature stages of some *Sepedon* snail-killing flies in Natal (Diptera: Sciomyzidae). Ann. Natal Mus. 25: 293-317.

That author reported (p. 312) that the copulating male of *Sepedon neavei* Steyskal "... extends his proboscis downwards, between the bases of the female's antennae, and makes contact with the female's partially extended proboscis. The male's labellum everts and preens the female's labellum—the male possibly passing regurgitated food to the female." His illustrations include a figure of this labellar contact during copulation.

If Barraclough's interpretations are correct, three conclusions pertinent to points raised in our paper are inescapable.

(1) Males of *S. neavei* must be included among those that expel nuptial food orally.

(2) Means of transmission of nuptial food are even more varied than we indicated; they include direct oral contact and may include regurgitation. We cannot assume that nuptial food was secreted by the salivary glands simply because it is transmitted orally.

(3) If this Ethiopian species practices nuptial feeding, this mating system almost certainly is used by some species of the *Sepedon* group in all zoogeographic regions. The species mentioned in our previous paper occupy parts of all zoogeographic regions except the Ethiopian. The ranges of the four "Asiatic" species discussed there are primarily Oriental, not Palearctic, as we indicated. However, *Sepedon aenescens* Wiedemann extends northward well into the Palearctic Region, and *S. plumbella* Wiedemann occurs throughout most of both the Oriental and the Australian Regions. The widespread occurrence of nuptial feeding in *Sepedon* and related genera may suggest that it evolved in primitive ancestral stock, and was then carried along by several species that descended from that stock when they dispersed to occupy their present ranges.

Clifford O. Berg, *Department of Entomology, Cornell University, Ithaca, New York 14853*, and Karl Valley, *Bureau of Plant Industry, Pennsylvania Department of Agriculture, Harrisburg, Pennsylvania 17110*.